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WHAT CITIES ARE DOING ABOUT THEIR ODOR PROBLEMS

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WHAT CITIES ARE DOING ABOUT THEIR ODOR PROBLEMS

This conference on odor control,* in many ways, is quite similar to one held by the Sanitary Engineering Division of the American Society of Civil Engineers in January of 1925, when a series of papers concerned with several aspects of the detection and control of odors and their relationship to community life were presented. These papers amply demonstrate that concern about odors in the environment of man is not a new phenomenon but rather one of long standing. Even Hippocrates, before the time of Christ, attributed an epidemic of plague to a corrupted atmosphere. His thinking was still accepted at the time of another plague epidemic in Paris in 1348, and for years afterward. The atmosphere of those times was "corrupted" principally because of waste disposal practices of the people. Dr. C.E.A. Winslow, in his paper at the 1925 meeting, observed that in order to maintain a pure atmosphere in urban areas it is necessary to make studies of the odor problem, insure proper design and operation of equipment in processes which might cause difficulty, and to arrange for the best possible geographic distribution of possible offenders through good town planning.(1) Cities have, indeed, been doing something about odor problems for a long time, and in a fashion strikingly similar to the practices of today.

The legal authority utilized by cities in controlling odor nuisances stems largely from the police powers vested in the States, which they have in turn delegated to cities. Exercise of these police powers includes authority to enact legislation to provide for the prevention and abatement

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of public nuisances and for the protection of the health, morals, and welfare of the people. Hence, the authority of cities is governed by the language of the delegation made by the State. A typical delegation would read:

> Municipalities may enact such ordinances as are necessary for the prevention of disease, protection of the public health, and the prevention, abatement or suppression of nuisances, not in conflict with state laws.

Nuisances, according to ruling case law, are "anything that works an injury, harm or prejudice to an individual or the public." Various other definitions can be found in local ordinances and other law sources.

Nuisances can be private, public, or mixed, and city governments may proceed to seek relief from the latter two. A nuisance, to be "public" in character must invade a common or public right and must affect a "substantial" number of persons. This number will vary depending upon the feeling of the court hearing the case and the circumstances surrounding the situation.

Nuisances are further classified as first, nuisances "per se" or those acts which have been so designated by common law or statute; second, acts which in their nature are not nuisances but may become so by reason of their locality, surroundings, or manner in which they may be conducted; and third, those which in their nature <u>may</u> be nuisances but as to which there may be honest difference of opinion in impartial minds. In this regimen, many cities have, by law, declared such activities as rendering, swine keeping, glue manufacturing, and so on, to be nuisances and thereby

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have outlawed them within their boundaries. However, no activity which cannot be shown to be a nuisance in fact may rightfully be declared to be a nuisance "per se" by a legislative body, nor may a state or municipality authorize by law an act which can be shown to be a nuisance.

When a municipality undertakes a control action in the case of an operation declared to be a nuisance "per se", it is only necessary to prove that the outlawed operation exists in order to cause its cessation. In the case of other nuisances the control agency must show that a nuisance condition does in fact exist and that a "substantial" number of persons are affected. However, the courts need not and do not always construe that an act declared to be a nuisance by a legislative body is in fact a nuisance, when hearing a particular case. When the facts in a case are fairly debatable, the court will usually confirm the judgment of the legislature. Generally, except where constitutional or property rights outweigh public necessity, the courts will prevent the pollution of the air. Another complicating facet in nuisance cases, however, is the long established right of each person to make reasonable use of his property. There are myriad circumstances which enter into the definition of the word "reasonable", and such use may or may not involve the creation of some condition unsatisfactory in the views of others situated nearby, but which a court will find allowable. Courts have been responsive to present-day conditions, and the interpretation of law, developed over the years, will generally reflect the onward march of civilization.(2)

From the foregoing, it should be evident that the local control official is confronted with a difficult task in seeking to arrange for the

equitable settlement of cases involving public unrest because of alleged nuisances due to odors. He must first decide in his own mind whether an odor nuisance does exist. Secondly, he must determine the source of the odors, a very difficult job in some cases. Next, he must decide whether the offending party is conducting his activities in a reasonable manner, and lastly, he must secure any needed corrective action. If abatement is not forthcoming, he must then be able to convince a court of his views in order to have the offending party enjoined to correct the condition.

Generally, every major city has an ordinance or board of health regulation dealing with offensive operations which have been troublesome in the past because of their emission of foul odors. These ordinances have been in effect for many years and typically are worded as follows:

> Any soap factory, tannery, chandler's shop, rendering plant, barn, packing house, factory, stagnant pool, building or structure or other thing which shall become noxious or shall emit foul or offensive odors, gases or other effluvia, or which shall be dangerous to the public health, is hereby declared to be a public nuisance.

Such ordinances have been enforced by local health officers or boards of health, usually upon complaint of one or more citizens. The usual procedure is to have a health department sanitarian investigate the matter complained of. If he is of the opinion that a nuisance exists, he attempts to secure its abatement by negotiation with the party responsible for the condition. If this fails to bring about correction, a hearing may be held before the health officer or the board of health,

where all testimony is heard. Based on the views of the hearing body, an order to abate the condition might be issued, based on a finding of the existence of a nuisance, or the matter might be dismissed. If a nuisance is found to exist and the order to abate it is not obeyed, the matter may be taken to the courts for adjudication. Some cities go directly to the courts after negotiations and requests fail to secure abatement and hold no formal hearings. Hearings may also be held when the health agency inspectors feel that a nuisance does not exist but some citizens feel to the contrary. This allows the hearing body to get all the facts and opinions in the matter upon which to base a decision and afford the citizens an opportunity to make their views publicly known. This type of procedure is still used in most cities, with various modification of details. In many cities it is used in addition to or in duplication of procedures provided for under terms of more specific air pollution legislation.

Generally such actions are not very successful because they seek to correct a condition which has been permitted to come into being rather than taking the more effective means of preventing the occurrence of unsatisfactory conditions through modern city planning or initial installation of equipment and procedures which would obviate the liberation of odors. Also, satisfactory means for the control of many odors have not been widely available, and often the question became one of either permitting the odor condition to exist or ordering the elimination of the offending source entirely. Needless to say, in many cases it was decided to be in the public interest to permit the odors to exist.

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Air pollution control laws over the country are quite uniform in their wording concerning odors when such a clause is included. Typically they are written as follows:

> No person shall cause, suffer or allow to be emitted into the open air from any equipment, processes, building, premise or any source whatever, any air contaminant, including but not limited to dust, fumes, odors, gases, vapors or other material that may be detrimental to the health, comfort, safety or welfare of the public, or create a nuisance or cause damage to property or vegetation.

There are many variations of this, but the general intent is the same. The techniques of enforcement used by air pollution control agencies are quite similar to those used by health departments in their work on similar matters, and the same difficulties are encountered. A few ordinances provide the additional enforcement tool of sealing offending equipment under certain specified conditions.

The more recently enacted air pollution control ordinances are designed to emphasize prevention rather than cure. This is accomplished by requiring any person who plans to build, install, erect, or alter any device, equipment or other facility capable of emitting pollutants to the atmosphere to first submit his plans to the control agency and obtain approval to proceed. This helps a great deal in preventing the occurrence of additional new unsatisfactory conditions. Smoke regulation ordinances ordinarily do not provide for such plan approvals except for fuel-burning

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equipment. The few cities that have enacted more inclusive air pollution ordinances, notably Los Angeles and New York, have been pleased with the results they have been able to achieve. However, such programs require suitably trained and experienced personnel be available to accomplish the necessary plan review.

Other techniques, which lend themselves to control of odor problems and are in common use throughout the country, are zoning and city planning. It is almost universal practice now to set aside certain areas of a city for such light industrial uses as cleaning plants, kennels, warehouses, laundries, paint shops, etc., and other portions of the city, for such heavy industrial uses as fat rendering, acid manufacture, coke plants, steel mills, varnish plants, etc. However, these measures require long periods of time to become effective, because of the common existence of nonconforming uses within the several zones. Also, because heavy industry must be located near rivers, railroads, and major roads, some restrictions are placed on the places where it may be located. Such places may not be ideal from an air pollution standpoint. A common failure now recognized in older zoning laws was to permit "higher" classes of use, as residential, in a "lower" class area, as industrial. The disadvantage of this is obvious and modern zoning laws do not permit it.

So much, then, for the generally applied techniques, plans, and ordinances. We may now discuss briefly a few atypical matters.

In Los Angeles where the "smog" situation is of great concern, the legal terminology applying to regulation of odors is much the same as in other cities, except for a few specific materials and processes. Of

interest, however, is the technique found very effective in evaluating difficult odor problems and locating the origin of the causative agent. The procedure used is to station several men with gas masks in the area of concern. The men breathe through the mask for a time to assure that odor fatigue does not prevail. Then the mask is removed and the presence or absence of odors is noted. The men then move to a new point and repeat the procedure; and using their information about suspected sources, wind patterns and observed odor intensity, the men try to follow the odor back to its source. Recorded wind patterns are checked later to confirm or refute the field observations and a conclusion is reached concerning the probable source of the odors. This procedure has been very effective in convincing responsible parties of their blame and in presenting court cases.

In Philadelphia, a study of odor problems in the Aramingo District revealed that the logical development of the area was being hindered by the existence of odors and other air pollutants. As a result of the study, sources of the odors were determined and plans were made to bring about their control. The City's Planning Commission, Air Pollution Control Board, and Redevelopment Authority, which sponsored the study, felt that a substantial forward step had been made in the economic growth of the city through rehabilitation of an undesirable area.(3) Also, the ordinance in Philadelphia contains some unusual wording intended to be of assistance to officials and the court in determining whether an odor nuisance exists. The clause provides in part that any emission shall be deemed a nuisance which tends to lessen normal food or water intake, or

produces irritation of the upper respiratory tract, or produces symptoms of nausea, or causes annoyance or discomfort.

Indianapolis and certain other cities have prohibited the burning of garbage in outdoor incinerators and trash burning in non-enclosed containers. This has enabled the control agency to bring these odor and smoke producing operations under control quite effectively without having to demonstrate the existence of excessive smoke or odor discharges.

In Louisville, one phase of a joint District, County, State, and Federal air pollution study consists of a survey of odor manifestations through the use of specially selected and trained volunteer observers. The study is planned to yield significant information on the location, frequency, duration, and intensity of odor visitations. The observers are also expected to make immediate reports of unusually severe conditions, so that technical teams can be dispatched to the field to make chemical analyses of the air and attempt to trace the source of the odors.

In Detroit, the Chief Smoke Inspector has advocated a plan for zoning of certain industries on the basis of performance with regard to emission of odors and other air pollutants, and to other troublesome aspects, rather than on the basis of a listing of specific types of industries. This is in recognition of present day technology which makes it possible to control many troublesome conditions which have not been controlled in the past. (4)

In Pittsburgh, it has been observed that, since the smoke has been greatly cleared up, people are becoming more conscious of odors, noxious

gases, and fumes. The amount of work required by the control agency in the last two years in handling odor complaints has increased to a point where inspections on this type of complaint are more numerous than on any other type.(5) I can confirm this observation from my own experiences in St. Louis where similar circumstances prevailed.

An interesting case is reported where an individual turned the existence of an odor problem to an advantage. There was a rendering plant located in an area which, except for the presence of the plant, would have been quite desirable. But, with the plant where it was, the neighborhood was losing its value and property offered for sale could not be sold at a good price. An enterprising individual quietly bought up nearly all of the property in the area, including the rendering plant. He then tore down the rendering plant and proceeded to sell his holdings. When the transactions were all completed, he had increased his original capital by five fold, a dramatic example of the value people place on an odor-free environment.

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